Amendments to the Claims

1.   (currently amended)   A method, comprising:

outputting a user interface configured to interact with an identity integration system to perform collective password management for multiple user accounts associated with a user;

receiving a selection of ~~selecting~~ multiple data sources connected to ~~an~~ the identity integration system input by the user via the user interface, wherein:

each of the multiple data sources corresponds to a different one of said multiple user accounts;

the identity integration system includes a management agent for each of the multiple data sources configured specifically for its respective data source to manage data communication between the identity integration system and each respective data source;

for at least some of the multiple data sources a management agent for the data source is configured with credentials to perform password management for a corresponding said user account; and

for at least one of the multiple data sources a management agent for the data source calls for custom logic configured as code, from a custom logic source outside the identity integration system, to perform password management for the data source;

receiving a new password input by a user via the user interface; and

performing an administrative password operation on ~~a~~ <u>multiple</u> password<u>s</u> <u>each</u> associated with ~~each~~ <u>one</u> of the selected multiple data sources to collectively update each ~~said~~ <u>of the multiple</u> password<u>s</u> to the new password, wherein the password operation is performed using the identity integration system.

2.   (original) The method as recited in claim 1, further comprising:

determining an identity of a user, wherein the multiple data sources are associated with the identity; and

querying the identity integration system to find the multiple data sources associated with the identity.

3.   (original) The method as recited in claim 1, wherein the password operation comprises updating one or more passwords associated with the multiple data sources using joined objects across the multiple data sources, wherein the joined objects are stored in the identity integration system.

4.   (original) The method as recited in claim 3, wherein some of the multiple passwords are updated to new passwords that differ from each other.

5.   (original) The method as recited in claim 3, wherein each of the multiple passwords is updated to the same password.

6.   (original) The method as recited in claim 1, wherein the password operation comprises one of changing, setting and resetting the password.

7.   (original) The method as recited in claim 1, wherein each of the multiple data sources differ from others of the multiple data sources with respect to at least one of a protocol, a platform, a format, and a data transmission medium for data storage.

8.   (original) The method as recited in claim 1, wherein each of the multiple data sources differs in a connection to the identity integration system with respect to at least one of a protocol, a platform, a format, and a data transmission medium for data storage.

9.   (original) The method as recited in claim 1, wherein each of the multiple data sources uses a different password management function.

10.   (original) The method as recited in claim 9, wherein the identity integration system performs password management for each of the multiple data sources.

11. (original) The method as recited in claim 1, wherein for at least some of the multiple data sources the identity integration system stores integrated identity information to perform password management.

12.-14. (canceled).

15. (original) The method as recited in claim 1, further comprising using the identity integration system to produce a list of user accounts associated with the multiple data sources, wherein the user accounts on the list are eligible for password management.

16. (original) The method as recited in claim 1, further comprising allowing access to the identity integration system through a web application for password management.

17. (original) The method as recited in claim 16, wherein the selecting multiple data sources and the performing a password operation are performed on a website generated by the web application.

18. (original) The method as recited in claim 17, wherein the web application accepts a password credential from a user to perform the password operation.

19.   (original) The method as recited in claim 17, wherein the web application verifies an identity of a user by asking the user questions, wherein if answers provided by the user are correct then the web application performs the password operation using the identity of a privileged user account.

20.   (original) The method as recited in claim 17, further comprising using the identity integration system to produce a list of user accounts displayable on the website, wherein the user accounts are associated with the multiple data sources.

21.   (original) The method as recited in claim 17, further comprising a help desk to at least assist in the performing a password operation.

22.   (original) The method as recited in claim 17, further comprising communicatively coupling the identity integration system with the web application using an interface.

23.   (original) The method as recited in claim 22, wherein the interface is publicly available.

24. (original) The method as recited in claim 22, wherein the interface allows a web application designer to customize the web application.

25. (original) The method as recited in claim 22, wherein the interface includes password management functions.

26. (original) The method as recited in claim 22, wherein the interface is capable of being changed for an improved version of the interface that adds more password management functions while using the same web application and the same identity integration system.

27. (original) The method as recited in claim 22, wherein the interface is a WINDOWS MANAGEMENT INSTRUMENTATION interface.

28. (original) The method as recited in claim 27, wherein the interface is secured using a security group.

29. (original) The method as recited in claim 28, wherein the interface is secured using a security group that allows both searching for a connector object associated with a data source and setting a password for an object in the data source, wherein a connector object represents at least part of the data source in the identity integration system.

30.   (original) The method as recited in claim 1, wherein an identity of a user associated with the multiple data sources provides a security credential for performing a password operation.

31.   (original) The method as recited in claim 17, wherein the web application produces a list of accounts associated with a user.

32.   (original) The method as recited in claim 31, wherein the web application lists only accounts eligible for password management.

33.   (original) The method as recited in claim 17, wherein the web application adopts a web application behavior based on a configuration setting.

34.   (original) The method as recited in claim 33, wherein the configuration setting is stored in a configuration file.

35.   (original) The method as recited in claim 17, wherein the web application checks if one of the data sources is communicating before updating a password associated with the data source.

36.   (original) The method as recited in claim 35, wherein the updating comprises one of changing and setting the password.

MS-303187.01

37.   (original) The method as recited in claim 17, wherein the web application checks if a connection to one of the data sources is secure before updating a password associated with the data source.

38.   (original) The method as recited in claim 37, wherein the updating comprises one of changing and setting the password.

39.   (original) The method as recited in claim 1, further comprising displaying a status for the password operation.

40.   (original) The method as recited in claim 39, further comprising displaying the status on a webpage.

41.   (original) The method as recited in claim 1, further comprising auditing the password operation.

42.   (original) The method as recited in claim 41, further comprising maintaining a password management history for the password operation.

43.   (original) The method as recited in claim 42, further comprising keeping the password management history in a connector space object, wherein the connector space object is included in the identity integration system.

44.   (original) The method as recited in claim 42, wherein the password management history includes a tracking identifier to an audit record of the password operation.

45.   (original) The method as recited in claim 41, further comprising maintaining a repository of audit records for password operations performed using the identity integration system.

46.   (original) The method as recited in claim 45, wherein an audit record for a password operation includes at least one of an identifier of a user associated with the password operation, a tracking identifier to a web application initiating the password operation, a tracking identifier to a connector object associated with the password operation, a tracking identifier to a management agent associated with the password operation, a password operation identifier, a password operation status, a date, and a time.

47.   (original) The method as recited in claim 1, further comprising associating custom logic with a password operation, wherein the custom logic is executed after the password operation is performed.

48.   (original) The method as recited in claim 47, wherein the custom logic sends an email.

49.   (original) The method as recited in claim 47, wherein the custom logic logs password management activity.

50.   (original) The method as recited in claim 47, wherein the custom logic performs a password operation on a subsequent data source not connected to the identity integration system.

51.   (original) The method as recited in claim 1, wherein the password operation further comprises updating passwords in both secure and non-secure data sources within the multiple data sources.

52.   (original) The method as recited in claim 1, wherein the password operation further comprises updating passwords over both secure and non-secure connections to the multiple data sources.

MS-303187.01

53.   (previously presented) An apparatus comprising:

a processor; and

a web application for password management executable on the processor having one or more modules including:

a user identifier to find user identity information in an identity integration system, wherein:

the identity integration system includes a management agent for each of multiple data sources to manage data communication between the identity integration system and each respective data source; and

for at least one of the multiple data sources a management agent for the data source calls for custom logic configured as code, from a custom logic source outside the identity integration system, to perform password management for the data source;

identity information query logic to search information in the identity integration system for accounts associated with the user;

an account lister to display the accounts associated with the user;

an account selector to designate at least some of the displayed accounts for password management;

a password inputter to determine a new password input by a user to associate with each designated accounts; and

a password manager to collectively manage passwords for the designated accounts by requesting an update of a password associated with each designated account to the new password, responsive to the user input.

54.   (previously presented)   The apparatus as recited in claim 53, wherein the identity integration system connects with diverse data sources, each data source having a different function for using password security.

55.   (previously presented)   The apparatus as recited in claim 53, further comprising an account status display to show selected accounts and a connection status of each account.

56.   (previously presented)   The apparatus as recited in claim 53, further comprising a password management status display to display a password management operation status for each account.

57.   (previously presented)   The apparatus as recited in claim 53, further comprising a status checker to verify connectivity and security of a connection between an account and the identity integration system.

58.   (previously presented)   The apparatus as recited in claim 53, further comprising a configuration reader to obtain behavior settings for the web application.

59.   (previously presented)   The apparatus as recited in claim 53, further comprising a custom logic executor to perform custom logic associated with a password management operation.

60.   (previously presented)   The apparatus as recited in claim 53, wherein the account lister lists only accounts eligible for password management.

61.   (currently amended) An apparatus comprising a processor coupled to memory, the memory storing one or more modules executable via the processor to implement:

an interface for coupling an identity integration system with a password management web application;

logic for communicating with the identity integration system, wherein:

the identity integration system is capable of collectively updating a password on multiple data sources that use various functions of password updating responsive to input of a single new password by a user;

the identity integration system includes a management agent for each of the multiple data sources to manage data communication between the identity integration system and each respective data source;

for at least some of the multiple data sources a management agent for the data source is configured with credentials to perform password management; and

for at least one of the multiple data sources a management agent for the data source calls for custom logic configured as code, from a custom logic source outside the identity integration system, to perform password management for the data source;

logic for communicating with the password management web application;

logic for searching for objects in the identity integration system; and

MS-303187.01

logic for checking a connection status between the identity integration system and a data source.

62.   (previously presented) The apparatus as recited in claim 61, further comprising logic for checking security of a connection between the identity integration system and a data source.

63.   (previously presented)   The apparatus as recited in claim 61, further comprising logic to change a password associated with the data source.

64.   (previously presented)   The apparatus as recited in claim 61, further comprising logic to set a password associated with the data source.

65. (previously presented) A password management system, comprising:

an identity integration system having a metaverse space for persisting integrated identity information regarding accounts associated with a user, and a connector space for persisting information representing multiple data sources connectable to the identity integration system, the accounts each corresponding to one of the multiple data sources and having associated manageable passwords;

for at least one of the multiple data sources, a management agent for the data source configured to call for custom code, from a custom logic source outside the identity integration system, to perform password management for the data source;

a web application for producing a list of the accounts from the identity integration system, for allowing selection of at least some of the accounts, for inputting by a user of a new password to cause the new password to be associated with each of the selected accounts, and for requesting the identity integration system to collectively update passwords on each of the selected accounts to the input new password; and

an interface to communicatively couple the identity integration system with the web application.

66. (original) The password management system as recited in claim 65, wherein the password management web application verifies one of an identity and a credential of a user.

67.   (original) The password management system as recited in claim 65, wherein the web application generates a webpage that displays accounts and a status of a password management operation for each account displayed.

68.   (original) The password management system as recited in claim 65, wherein the web application operates in a security context.

69.   (original) The password management system as recited in claim 68, wherein the security context is an application pool identity.

70.   (original) The password management system as recited in claim 69, further comprising a help desk application, wherein the web application denies a user access to the help desk application if a security group of the user is not approved by the web application.

71.   (original) The password management system as recited in claim 65, wherein the identity integration system stores a password management operation history for each account.

72.   (original) The password management system as recited in claim 65, wherein the identity integration system communicates with diverse accounts, each account having a different mechanism for administering a password associated with the account.

73.   (original) The password management system as recited in claim 72, wherein the identity integration system does not natively communicate with at least some of the diverse accounts.

74.-79. (Canceled)

80. (previously presented) A computer-implemented method comprising:

retrieving a list of user accounts from an identity integration system having persisted identity information regarding the user accounts wherein, the identity integration system includes a management agent for each of multiple data sources configured specifically for its respective data source to manage data communication between the identity integration system and each respective data source;

outputting a user interface showing the list of user accounts on a display;

allowing each account in the list to be selected using a user interface selection device operable to input selections via the user interface output on the display;

allowing input of a new password via the user interface selection device; and

allowing input of a request to update old passwords associated with each of the selected accounts to the new password input via the user interface.

81. (previously presented) The method as recited in claim 80, further comprising allowing input of user credentials to verify an identity of the user.

82. (previously presented) One or more computer readable storage media containing instructions that are executable by a computer to perform actions, comprising:

selecting multiple data sources connected to an identity integration system;

receiving a new password input by a user to cause the new password to be associated with each of the selected multiple data sources; and

using the identity integration system to collectively update a password associated with each of the selected multiple data sources to the new password input by the user.

83. (previously presented) The one or more computer readable storage media as recited in claim 82, wherein at least some of the multiple data sources connected to the identity integration system communicate in a manner different than a native communication of the identity integration system.

84. (previously presented) The one or more computer readable storage media as recited in claim 82, wherein the identity integration system accomplishes a password update on each of the data sources regardless of whether the data sources connected to the identity integration system communicate in a manner different than a native communication of the identity integration system.

MS-303187.01

85.   (previously presented)   The one or more computer readable storage media as recited in claim 84, wherein the identity integration system accomplishes a password update on at least one of an ACTIVE DIRECTORY® data source, a SUN ONE server data source, a LOTUS NOTES server data source, a WINDOWS® NT™ server data source, a NOVELL® EDIRECTORY™ server data source, and a flat file data source.